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COMMITTEE ON THE PEACEFUL USES
OF OUTER SPACE
Scientific and Technical Subcommittee
Twenty-ninth session

DRAFT REPORT OF THE SCIENTIFIC AND TECHNICAL SUBCOMMITTEE ON THE WORK OF ITS TWENTY-NINTH SESSION

Addendum

III. MATTERS RELATING TO REMOTE SENSING OF THE EARTH BY SATELLITES INCLUDING, INTER ALIA, APPLICATIONS FOR DEVELOPING COUNTRIES

1. In accordance with General Assembly resolution 46/45, the Subcommittee continued its consideration of this item.

2. In the course of the debate, delegations reviewed the national and cooperative programmes in remote sensing. Examples were given of national programmes in developing and developed countries and of international programmes based on bilateral, regional and international cooperation, including programmes of technical cooperation between developing countries. Countries with advanced capabilities in the field, including some developing countries, described programmes to provide assistance to other developing countries.

3. The Subcommittee took note of the continuing programmes of China, France, India, Japan, the Russian Federation, the United States and ESA for remote-sensing satellites as well as the planned remote-sensing satellite systems of Brazil and Canada. It also took note of the remote-sensing activities of FAO for mapping, assessment and management of renewable natural resources for the benefit of developing countries and of UNESCO in the area of education and training in remote sensing, particularly for oceanography. The Subcommittee heard special presentations on remote sensing by experts from Canada, India and the United States, as mentioned in paragraph 16 of the present report.

4. The Subcommittee reiterated its view that remote-sensing activities should take into account the need to provide appropriate and non-discriminatory assistance to meet the needs of the developing countries.

5. The Subcommittee emphasized the importance of making remote-sensing data and analysed information available to all countries at reasonable cost and in a timely manner. The Subcommittee also recognized the need for continuing free access to data from operational meteorological satellites.

6. The Subcommittee felt that international cooperation in the use of remote-sensing satellites should be encouraged, both through coordination of the operations of ground stations and through regular meetings between satellite operators and users. It noted the importance of compatibility and complementarity of existing and future remote-sensing systems. The Subcommittee also noted the importance, particularly for the developing countries, of sharing experiences and technologies, of cooperation through international and regional remote-sensing centres and of joint work on collaborative projects.

7. Recalling General Assembly resolution 41/65 of 3 December 1986, by which the Assembly had adopted the Principles Relating to Remote Sensing of the Earth from Outer Space, the Subcommittee recommended that at its thirtieth session it continue its discussion on remote-sensing activities conducted in accordance with those principles, during its consideration of the agenda item concerning remote sensing.

8. The Subcommittee recommended that the item be retained on its agenda as a priority item for the next session.

IV. USE OF NUCLEAR-POWER SOURCES IN OUTER SPACE

9. In accordance with General Assembly resolution 46/45, the Subcommittee continued its consideration of this item.

10. In accordance with General Assembly resolution 46/45, the Working Group on the Use of Nuclear Power Sources in Outer Space was reconvened to resume its work at the current session. The Working Group met from 26 February to ___ March under the chairmanship of Professor J. H. Carver (Australia). At a meeting held on ___ March 1992, the Working Group adopted its report (A/AC.105/C.1/WG.5/L.28).

11. At its ____th meeting, on ___ March 1992, the Subcommittee adopted the report of the Working Group, which is contained in annex III to the present report.

12. The Subcommittee agreed that Member States should be invited to report to the Secretary-General on a regular basis with regard to national and international research concerning the safety of nuclear-powered satellites.

13. The Subcommittee agreed that further studies should be conducted on the problem of the collision of nuclear-power sources with space debris and that it should be kept informed of the results of such studies. The Subcommittee took note of a working paper submitted by the Russian Federation (A/AC.105/L.180) containing preliminary results of studies on the question.

14. The view was expressed that it would be desirable for IAEA to continue to provide technical views and expert services on issues on which it had relevant experience.

15. The Subcommittee recommended that the item be retained on its agenda for the next session.

16. The Subcommittee also recommended that the question of reconvening the Working Group on the Use of Nuclear Power Sources in Outer Space be considered by the Committee at its next session in the light of the work carried out by the Legal Subcommittee on the subject at its thirty-first session.

V. QUESTIONS RELATING TO SPACE TRANSPORTATION SYSTEMS AND THEIR IMPLICATIONS FOR FUTURE ACTIVITIES IN SPACE

17. In accordance with General Assembly resolution 46/45, the Subcommittee continued its consideration of this item.

18. In the course of the discussion, delegations reviewed the national and international cooperative programmes in space transportation systems, including expendable launchers, reusable space shuttles, space stations and research on aerospace planes. In particular, the Committee noted that China was continuing the use and development of its Long March series of launch vehicles; that India was continuing development of the Augmented Satellite Launch Vehicle and the Polar Satellite Launch Vehicle and had initiated development of a Geostationary Satellite Launch Vehicle; that Japan was continuing its development of the H-II and M-5 launch vehicles and conducting research on the H-II Orbiting Plane (HOPE); that the Russian Federation was continuing the space transportation programme of the Soviet Union in cooperation with other countries of the Commonwealth of Independent States, including the use of expendable launchers and of the crewed Mir space station; that the United Kingdom was studying, in cooperation with the Russian Federation, the air-launched, reusable HOTOL launch system; that the United States was continuing its programme of expendable launches and flights of the reusable Space Shuttle and was developing the Space Station Freedom in cooperation with Canada, Japan and ESA as well as conducting research for the National Aerospace Plane; and that ESA was continuing development of the Ariane series of launch vehicles and the crewed Hermes space plane. The Subcommittee heard a special presentation by astronauts from Canada, the United States and the European Space Agency on the International Microgravity Laboratory Mission, as mentioned in paragraph 16 of the present report.

19. The Subcommittee stressed the importance of international cooperation in space transportation in order to provide all countries with access to the benefits of space science and technology.

20. The Subcommittee recommended that consideration of the item be continued at its next session.

VI. EXAMINATION OF THE PHYSICAL NATURE AND TECHNICAL ATTRIBUTES OF THE GEOSTATIONARY ORBIT; EXAMINATION OF ITS UTILIZATION AND APPLICATIONS, INCLUDING, INTER ALIA, IN THE FIELD OF SPACE COMMUNICATIONS, AS WELL AS OTHER QUESTIONS RELATING TO SPACE COMMUNICATIONS DEVELOPMENTS, TAKING PARTICULAR ACCOUNT OF THE NEEDS AND INTERESTS OF DEVELOPING COUNTRIES

21. In accordance with General Assembly resolution 46/45, the Subcommittee continued its consideration of this item.

22. In the course of the discussion, delegations reviewed national and international cooperative programmes in satellite communications, including progress in communications satellite technology that would make satellite communications more accessible and less expensive and increase the communications capacity of the geostationary orbit and the electromagnetic spectrum. The Subcommittee took note of studies and research on the use of multiple, low-orbiting satellites for low-cost satellite communications. The Subcommittee heard a special presentation on alternatives to the geostationary orbit for satellite communications, as mentioned in paragraph 16 of the present report.

23. Some delegations expressed the view that the geostationary orbit was a limited natural resource and that saturation should be avoided in order to ensure that all countries had non-discriminatory access to the orbit. Those delegations felt that a special regime was required to ensure equitable access by all States, particularly developing countries. They felt that the roles of ITU and the Committee on the Peaceful Uses of Outer Space with respect to the geostationary orbit were complementary. Other delegations expressed the view that questions relating to the geostationary orbit were being addressed effectively in ITU.

24. Some delegations expressed the view that in considering the question of equitable access, account should be taken in particular of the characteristics of the equatorial countries.

25. Some delegations noted that the use of the geostationary orbit, like other orbits, was affected by the problem of space debris and that efforts were needed to minimize the generation of debris in the orbit.

26. The Subcommittee recommended that consideration of the item be continued at its next session.